

## Research Methodology

### 3.1. Overview

The research focused on Federal check recipients who do not have an account at a financial institution. In addition, the survey was designed to collect information on Federal check recipients who have a banking relationship in order to perform a meaningful comparison between these two populations.

The scope of the research was national. Surveys were sent to all 50 states, the District of Columbia, and Puerto Rico, in proportion to the overall Federal check recipient geographic distribution. The study was also conducted across multiple Federal benefit programs including Social Security Administration, Supplemental Security Income, Veterans Affairs, Office of Personnel Management, and Railroad Retirement Board.

The research study consisted of multiple phases:

- Survey design
- Sampling process
- Telephone matching and screening
- Administration of the Mail survey
- Special sessions of in-person surveys
- Data collection and cleaning
- Analysis and reporting

### 3.2. Survey Design

#### ***Design Process***

A paper-based questionnaire was developed as the primary research instrument for understanding opinions about bank accounts from the perspective of Federal check recipients who do not have an account at a financial institution.

Questions were developed to gather the following information on Federal check recipients:

- Attitudes about banking services
- Access to banking services
- Attractiveness of various elements of the ETA (via conjoint analysis) and the choices that would be made on the basis of features and fees
- Demographic characteristics

The initial questionnaire was pre-tested with seven individuals in a GED program in the Boston area to ensure that the language used could be understood by individuals with limited education. On the basis of this test, changes were made to the phrases and terms used in the survey questions. In addition, the draft questionnaire was reviewed by inter-agency collaboration in accordance with the Paper Reduction Act. Finally, the draft questionnaire was also submitted to FMS and OMB for approval. Their comments were integrated into the final questionnaire. A copy of the survey is in Appendix A.

A Spanish version of the survey was also produced to minimize language biases. The cover of the English version of the survey included instructions in Spanish for obtaining a Spanish-speaking administrator who could send out a Spanish version of the survey.

— **“ESPAÑOL: Si usted necesita una copia en español, por favor llame a Javier Nogales al numero gratuito 1-800-895-3900.”**

In addition, bilingual researchers conducted approximately one-third of the telephone screening calls and were available to answer incoming toll-free calls. Spanish language surveys accounted for nearly 2% of the completed surveys.

Given the time required for participants to complete the questionnaire, an incentive was offered to complete the survey. All respondents were given a flat incentive payment of \$20 plus a chance to win a grand prize — a new television valued at \$500. Dove Associates’ past experience administering conjoint surveys to consumers has demonstrated the very positive impact of a monetary compensation on response rate — estimated at approximately one dollar per minute spent to complete the survey. Furthermore, response rates have been maximized when fixed per respondent incentive is combined with a sweepstake. In this particular survey, only one size of incentive was offered to ensure equity among participants and, therefore, there is no information to assess bias. The only specific feedback about the incentive provided by respondents was their follow-up calls on the status of the payment, which suggest that the incentive was attractive. A total of \$16,732 incentive value and postage reimbursements were paid to the respondents.

## ***Conjoint Methodology***

A key component of the research instrument was the choice-based conjoint scenarios that were created and analyzed by the CBC software from Sawtooth Technologies. CBC examines respondents' preferences in a format that includes a 'no sale' option (i.e., "Which, if any, of these products would you select?"). This makes the choice decisions realistic and provides insight into why unbanked check recipients may not choose to use bank accounts.

Prior research studies suggest that Federal check recipients who do not have an account at a financial institution may not be comfortable with 'technology intensive' research methodologies. Therefore, the conjoint survey was administered using a paper-based survey via telephone, by mail or in-person.

CBC methodology limits the number of product features that can be tested to six, with the characteristic that each feature can have five levels. The conjoint part of the questionnaire gathered information on six features related to ETA specifications proposed by Treasury:

- Monthly fees
- Monthly cash withdrawals
- Cash access points
- Automatic bill payment
- Interest paid on balances
- Deposits from Federal and other sources

### **3.3. Sampling Process**

#### ***Sample Size***

FMS specified that a probability sample be used with a large enough number of prospective ETA customers to have an allowable error of +/- 5% with a 95% confidence level. This level of statistical accuracy for tests of preference shares can be met with 384 responses for binomial response analyses. However, a larger sample size is necessary to attain similar levels of accuracy for all the following sub-groups.

- Program
- Ethnic Group
- Age
- Region
- Income
- Area

Choice-based conjoint analysis is a repeated-measures technique for which sample sizes are estimated differently due to multiple observations from each respondent. The rule of thumb is that 30 to 40 respondents per research cell is generally sufficient. The power tables for a 95% confidence level and an allowable error of 5% suggests that the number of responses per cell should range from 32 for the three-cell segmentation schema to 39 responses for each of the five-cell segments. (See “Tables of Sample Sizes in Analysis of Variance,” *Journal of Quality Technology* (1970)).

## Sample Selection

A probability sample was used. Randomly selected names and addresses of July 1998 Federal check recipients were drawn from each program’s files and delivered to Dove Associates for sampling. The two-stage process and the initial number of names requested were based on prior research done by Shugoll/Booz, Allen & Hamilton. Their 1997 study documented unbanked rates to be 18% over the phone and 27% by mail — an aggregated 24% unbanked rate among Federal check recipients.

A first qualifying test was run on the 11,963 Federal check recipient names delivered by FMS by eliminating non-individual (usually institutions) records.

**Initial Database by Agency**

Agency	Total Records	Disqualified Records	Revised Total Records for Sampling
SSA	4,992	188	4,804
SSI	3,987	208	3,779
VA	1,594	19	1,575
OPM	991	14	977
RRB	399	9	390
Total	11,963	438	11,525

Table 3.1

A quota sampling method was used to ensure national projectionability for sub-segments. The names were used to meet program and geographic distribution criteria. Due to the disproportionately low number of checks sent to various programs, the smaller program segments were over-sampled. Within each program list, names were randomly selected again to meet state quotas in Dove’s attempt to balance responses across regions and minimize geographic bias.

- Guidelines for program distribution were based on Treasury published numbers for benefit payments by program (Oct 98 – Dec 98).<sup>1</sup>

<sup>1</sup> Source: 1<sup>st</sup> Quarter Update – FY99, Governmentwide Treasury-Disbursed, Cumulative Payment Volume.

### Federal Benefit Check Payments by Agency

Agency	Check Payments	Percent of Total Checks
SSA	11,268,040	69%
SSI	3,711,835	23%
VA	848,606	5%
OPM	239,851	2%
RRB	209,632	1%
Total	16,662,291	100%

Table 3.2

- Guidelines for state distribution were based on 1997 Treasury data for Federal check benefit payments by state provided to Dove from a Booz, Allen & Hamilton study.

### 3.4. Telephone Screening

A telephone screening of 2,000 Federal check recipients was conducted to identify recipients without a bank account.

#### **Telephone Matching**

The sample database was matched with publicly listed telephone numbers.

Out of 11,525 names in the revised database, 4,773 names were successfully matched with a telephone number. Two thousand of these names were randomly selected and became the base for telephone screening calls. Of the revised database, 41% of the names were matched. The telephone matching rates by program are shown below in Table 3.3.

#### Telephone Matching Rates

Agency	Total Records (revised)	Matched Records	Percent Matched	Sample	Sample Distribution
SSA	4,804	2,346	49%	1,118	56%
SSI	3,779	1,132	30%	379	19%
VA	1,575	612	39%	158	8%
OPM	977	418	43%	182	9%
RRB	390	205	53%	163	8%
Total	11,525	4,713	41%	2,000	100%

Table 3.3

#### **Screening Calls**

A letter printed on Department of Treasury stationery was mailed to the 2,000 randomly selected check recipients to inform them that they would receive a call from Dove Associates. (See Appendix B)

Dove Associates research staff placed calls to the recipients that had been matched with a telephone number and who had been sent the advance letter. Three call attempts were made to each person across three different times of day before abandonment.

- A total of 3,752 call attempts were made, out of which 1,245 were successful contacts. A successful contact was defined as talking to the recipient or with a representative if the recipient was unable to talk to the interviewer.
- Among people who were contacted:
  - 60% had a bank account
  - 20% did not have a bank account
  - 20% did not want to reveal their banking status
- Among the recipients contacted who were willing to reveal their banking status, 246 said that they did not have a bank account. Of these, 211 agreed to participate in the survey.

During the telephone screening process, surveys were mailed at the end of each day to recipients who had agreed to participate.

### ***Follow-up Calls***

Individuals who had agreed to participate but had not completed the survey within two weeks received follow-up calls.

A second wave of follow-up calls was performed with an attempt to conduct the actual survey over the phone in order to accelerate the data collecting process.

A third and fourth wave of follow-up calls were conducted to remind recipients of their agreement to participate.

### ***Telephone Screening Administration***

To maximize the reliability of the process, the following system procedures were implemented:

- A database with the names, addresses, programs, and phone numbers of the 2,000 recipients selected for the screening was created in Microsoft Access.
- The system generated one tracking form per recipient with the relevant information for the interviewer. A copy of the form is in Appendix C. This form was used to track the call attempts and collect the demographic and banking information for each recipient.
- Non-response was tracked to identify any consistent patterns. Recipients who did not want to participate during telephone screening were asked key demographic questions.
- Information was collected whether or not an individual had a bank account in order to provide comparative data.
- Information was entered and saved daily into the database.
- The project manager generated daily reports to monitor progress and identify areas that needed improvement, such as specific programs or specific regions.

### 3.5. Mail Survey

#### ***Initial Mailing***

For recipients who did not match up with a telephone number, screening was not possible and a survey mailing was necessary to ensure an equal chance of participating in the research and to avoid systematic bias.

There were 6,752 names left without a telephone number after the telephone matching process. Among these, 2,000 names were randomly selected for the mail survey.

**Sample Distribution by Agency**

<b>Agency</b>	<b>Telephone Screening Surveys</b>	<b>Telephone Screening Surveys %</b>	<b>Mail Surveys</b>	<b>Mail Surveys %</b>	<b>Total Surveys</b>	<b>Total Surveys %</b>
SSA	99	47%	983	49%	1082	49%
SSI	85	40%	499	25%	584	26%
VA	12	6%	190	10%	202	9%
OPM	7	3%	164	8%	171	8%
RRB	8	4%	164	8%	172	8%
Total	211	100%	2,000	100%	2,211	100%

*Table 3.4*

The 2,000 questionnaires were mailed with cover letters and postage-paid envelopes on February 2, 1999. The following procedures for maximizing response rates were implemented:

- The survey was easy to follow with visual supports such as scale questions. The number of conjoint cards was kept to a minimum to accelerate the completion process.
- A large font — **Arial 14**, recommended by FMS — was used to facilitate understanding and to make it easier for senior adults, visually impaired, and low-literacy individuals to read.
- There were no identifiers on the survey or on the postage-paid return envelope, unless the respondent voluntarily supplied his/her name and address. In any case all respondents were assured complete confidentiality.
- The cover letter was printed on Department of Treasury stationery and was signed by the FMS Assistant Commissioner of Federal Finance. The letter explained to Federal check recipients why participation in the survey is important, stressed the respondents' confidentiality, and noted the required response date. See Appendix D for a copy of the letter.

- The surveys were mailed in envelopes similar to those used for the respondents' checks. The letters and surveys were mailed from the FMS Hyattsville Financial Center.
- A postage-paid envelope addressed to "Treasury Survey c/o Dove Associates" was included with the survey.

### ***Follow-up Mailings***

Several actions were undertaken to encourage recipients to participate in the survey:

- A reminder postcard was sent to non-respondents approximately two weeks after the initial mailing, asking them to complete the survey and mail it back. See Appendix E for a copy of the postcard.
- A second questionnaire was mailed approximately one month later to the 645 recipients who had not responded.

### ***In-person Surveys***

In order to better understand the survey subjects and potential non-response bias, Dove Associates attempted to meet some of the recipients who had not returned a completed survey.

A Treasury letter was created, along with a participation response form (see Appendix F), to invite 156 Federal check recipients into Federal facilities for special survey sessions in six cities across the country:

- |               |                 |
|---------------|-----------------|
| ● Atlanta     | ● New York      |
| ● Boston      | ● San Francisco |
| ● Los Angeles | ● Washington    |

The four-hour long sessions took place between March 22, 1999 and March 29, 1999. The rate of attendance was very low with only three attendees. Dove had offered to reimburse attendees for their transportation expenses.

The participation form requested recipients who would not attend the session to explain why. The goal was to understand the non-responding segment of the targeted population and to determine if there were any systematic biases in the research. Only 22 invitees who did not want to attend the session sent the participation form back. A majority (14) indicated that they could not attend because of their difficulty going to places, mostly because of illness or disability. Six respondents stated — "I just want my benefit check and do not wish to participate."

## **3.6. Data Collection and Cleaning**

Of the 2,211 surveys (and 2,000 postcards) sent out, 77 were returned as undeliverable. Surveys were undeliverable because the recipient had changed address or was deceased. In addition, 97 returned surveys were considered invalid for several reasons: they were returned blank, the recipient did not receive any benefit check, or the recipient was not a check



recipient anymore but a direct deposit recipient. Finally, 55 recipients excluded themselves from the sample by calling or telling Dove Associates during the telephone follow-up calls that they wanted to be removed from the list. As a result the sample base was revised down to 1,989 Federal check recipients.

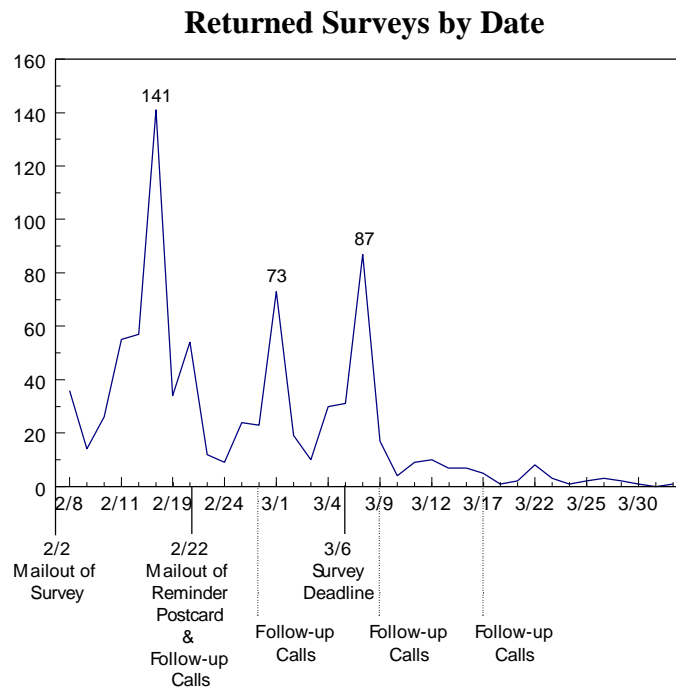


Figure 3.1

A total of 846 completed surveys were returned and included in the analysis. Out of this total, 385 respondents did not have a bank account and 461 had a bank account, yielding an overall response rate of 43%. The response rate for the targeted population of Federal check recipients who do not have a bank account is 61%, assuming a 27% rate (based on the Shugoll Research/Booz, Allen & Hamilton results) of unbanked among Federal check recipients who did not have a phone number and were sent a mail survey.

- With a revised base of 1,989 surveys, a 27% unbanked rate for mail surveys, and an 85% unbanked rate for screened surveys, the unbanked Federal check recipients base is 632. With a return of 385 surveys completed by unbanked recipients, the response rate is 61%, as illustrated below:

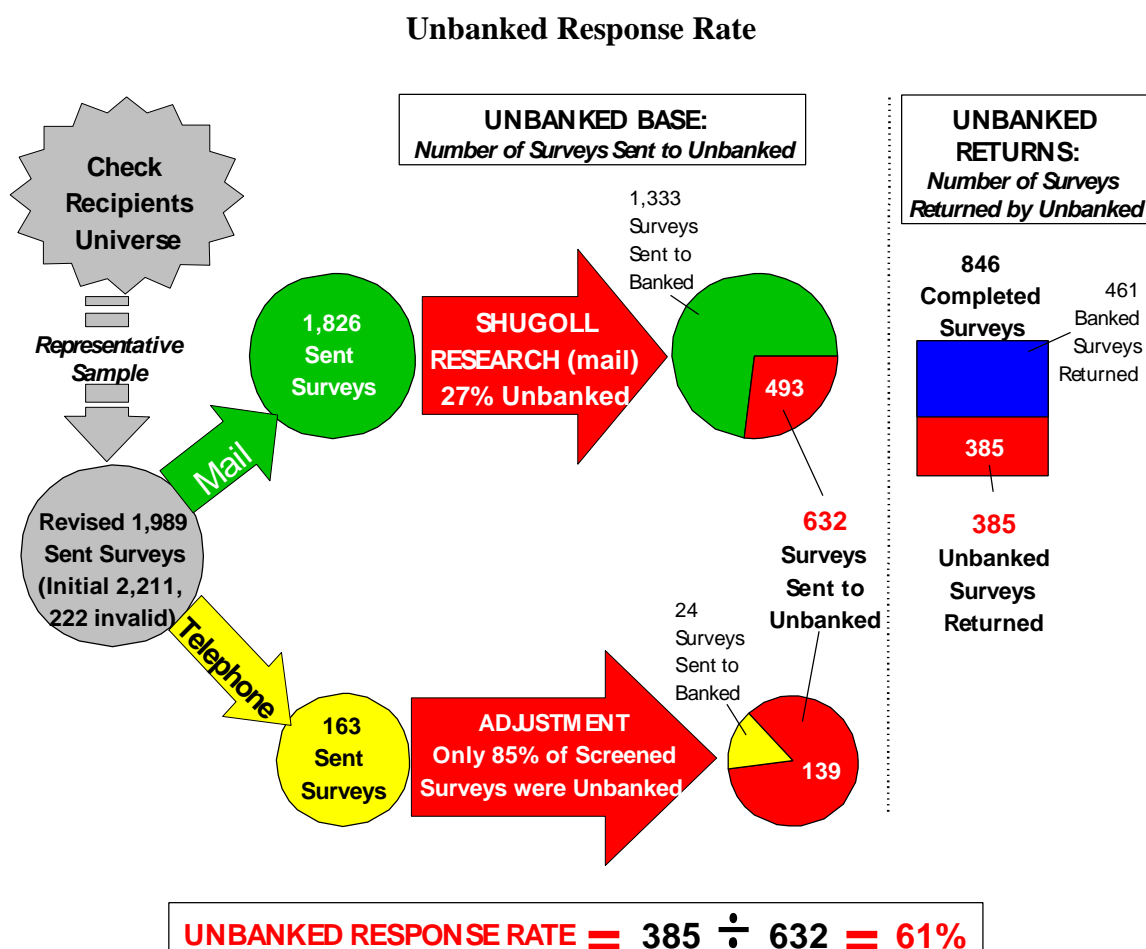


Figure 3.2

- The assumption of a 27% unbanked rate for a mail survey was based on a FMS/Treasury commissioned study conducted by Shugoll Research. This study was based on a survey with a response rate of 42%, which meant, according to Shugoll, that their results were reliable to plus or minus 3.6 percentage points at the 95% confidence level<sup>2</sup>. Therefore, this same range can be used to estimate Dove study's response rate. This implies that the likely number of surveys sent to unbanked in the mail survey ranges from 427 to 559, and the total number of surveys sent to unbanked would be between 565 and 697 surveys, yielding a response rate range of 55% to 68%.

A 61% response rate is substantially higher than private sector standards for projectionability, but does not meet OMB's 70% response rate standard requirement. Therefore, the results presented in this report should not be, applying OMB standards, projected nationally to the overall unbanked Federal check recipient population.

#### Responses by Agency

Agency	Total Surveys	Revised Surveys <sup>3</sup>	Unbanked Rate <sup>4</sup>	Unbanked Rate Adj. <sup>5</sup>	Unbanked Surveys	Returns <sup>6</sup>	Response Rate
SSA	1082	973	20%	25%	246	226	92%
SSI	584	525	64%	51%	425	202	48%
VA	202	182	20%	25%	46	30	65%
OPM	171	154	6%	8%	12	7	60%
RRB	172	155	11%	14%	21	13	60%
Total	2,211	1,989			750	478	

Table 3.5

It should be noted that this study includes a comparable number of responses and a slightly higher overall response rate than the Shugoll Research study that was released in 1997.

<sup>2</sup> Source: Mandatory EFT Demographic Study OMB #1510-00-68, September 15, 1997, Booz Allen & Hamilton, Shugoll Research.

<sup>3</sup> Overall revision factor of 90% (1,989 versus 2,211) applied by program.

<sup>4</sup> Based on telephone screening.

<sup>5</sup> Unbanked rates based on telephone screening are adjusted up for mail surveys, based on Shugoll Research (18% unbanked rate via telephone versus 27% unbanked rate via mail).

<sup>6</sup> Total does not add up to 385 because of double count of recipients who receive both SSA and SSI payments.

### 3.7. Validity

This survey achieved a 61% participation rate. According to the terms of clearance by the Office of Management and Budget, since the survey did not achieve a response rate of at least 70%, and follow-up attempts top survey non-responders did not generate the required 80% participation rate, it cannot be considered representative of the population.

The information in these chapters provides a context and insight into the survey participants and facilitates an understanding of the respondents' ETA product configuration preferences that are presented in Chapters Seven and Eight.

Statistical inferences on the Parts One, Two and Four of the questionnaire, discussed in Chapters Four, Five and Six, are made using statistical procedures at a 95% significance level (e.g., Anova F-tests, Chi-Square statistics, etc.) which control for sample size and are based on standard errors of estimate. Additionally, Bonferroni's corrections have been applied to control for spurious results based on the  $\alpha = 0.05$  level in cases where multiple inquiries into the data set have been performed.

The estimates of the characteristics and conjoint product preferences in this report are based on a sample of recipients and, consequently are subject to sampling error. One indicator of the sampling error associated with a given estimate is its standard error. Standard errors measure the variation in estimated values that would be observed if multiple replications of the sample were drawn. The magnitude of the standard errors depends on:

- The degree of variation of the variable within the population from which the sample is drawn.
- The design of the sample, including issues such as stratification and sampling probabilities.
- The size of the sample on which the estimate is based.

The conjoint methodology, used in Part Three of the questionnaire, is a repeated-measures technique that gathers multiple observations from each respondent. This provides more observations (13 degrees of freedom per respondent) for the conjoint analyses than can be attained from the univariate questions in Parts One, Two and Four of the questionnaire.

Conjoint 'take-rates' are presented as point estimates. Due to the sampling methodology, variability could exist, therefore the information is also presented with a 95% confidence interval based on plus or minus two standard errors. The detail is provided in Appendix I.

The total of 385 unbanked returned surveys is large enough for testing binomial differences in proportion with the allowable error of +/- 5% with a 95% confidence level<sup>7</sup>. The multinomial logistical regression models of respondents' binary choices are nationally projectionable for the unbanked Federal check recipient population. This level of accuracy is not maintained for the demographic segmentation cuts. Therefore, differences among groups are tested using standard errors-based approach and t-tests at a 95% level unless otherwise noted.

The discussion of model-fitting is provided in Chapter Seven. Model parameters have been evaluated using t-statistics to determine the validity. The goodness fit of the logistical models that are used to estimate 'take-rates' were evaluated using the Root likelihood values generated in CBC (analogous to R-Square in OLS regressions). All segmentations presented had values in excess of 0.3, which is considered to be good.

### 3.8. Response Bias

Based on the limited demographics information available on program participants and the data provided by non-respondents, it does not appear that any non-response bias is evident with respect to the banked versus unbanked dimension. The percentage of Black unbanked respondents was higher than the national average in the population. However, other research has also shown that this ethnic group has a higher unbanked rate than Whites. This may suggest that the sample is reflective of the overall unbanked Federal check recipient population.

Tracking data from follow-up research anecdotally suggests that non-respondents may have tended to be:

- Older
- Disabled
- Male

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<sup>7</sup> The estimate is valid using the binomial probability distribution  $((1.96)^2 (p(1-p))/(5\% \text{ allowable error})^2)$  where  $p=50\%$

### 3.9. Segmentation

- By program
 

SSA only	VA
SSI only	OPM <sup>8</sup>
SSA & SSI	RRB <sup>8</sup>
- By Area
 

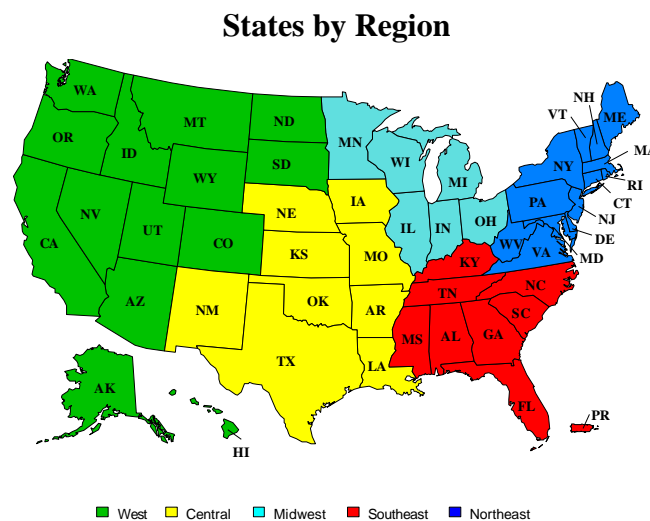
City	Small town
Suburb <sup>8</sup>	Countryside
- By Ethnic Group
 

Black	Other
Hispanic	White
- By Age
 

Under 18 <sup>8</sup>	35-44	65-74
18-24	45-54	75-84
25-34	55-64	Over 84
- By Income
 

Under \$2,000	\$6,000-\$7,999	\$15,000-\$19,999	\$30,000-\$39,999
\$2,000-\$3,999	\$8,000-\$9,999	\$20,000-\$24,999	\$40,000-\$49,999
\$4,000-\$5,999	\$10,000-\$14,999	\$25,000-\$29,999	Over \$50,000
- By Region
 

Regions used for the segmentation were defined as follows:



*Figure 3.3*

<sup>8</sup> Usually not presented due to small sample size.